



Atty. Dkt. No. 040679-1191

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Withdrawn) A catalytic converter, comprising:
 - a carrier;
 - a hydrocarbon (HC) trap layer trapping HC, said HC trap layer being disposed on the carrier; and
 - at least two catalyst layers comprising an inner layer disposed on the HC trap layer and an outer layer disposed on the inner layer, said inner and outer layers comprising catalyst noble metals,
 - an amount of said catalyst noble metal present in the outer layer based on a unit volume of the carrier being larger than an amount of the catalyst noble metal present in the inner layer based on the unit volume of the carrier.
2. (Withdrawn) A catalytic converter as claimed in claim 1, wherein the catalyst noble metals comprise rhodium, an amount of the rhodium being calculated as a value obtained by multiplying the amount of the rhodium by a predetermined number.
3. (Withdrawn) A catalytic converter as claimed in claim 2, wherein the predetermined number is defined depending on the kind of the catalyst noble metals other than rhodium.
4. (Withdrawn) A catalytic converter as claimed in claim 2, wherein the outer layer comprising the rhodium is an outer-most layer.
5. (Withdrawn) A catalytic converter, comprising:
 - a hydrocarbon (HC) trap layer trapping HC; and
 - at least two catalyst layers comprising an inner layer disposed on the HC trap layer and an outer layer disposed on the inner layer, each of said inner and outer layers comprising a catalyst noble metal and a washcoat,

a mass ratio of said catalyst noble metal present in the outer layer to the washcoat present therein being higher than a mass ratio of the catalyst noble metal present in the inner layer to the washcoat present therein.

6. (Withdrawn) A catalytic converter as claimed in claim 5, wherein the outer layer is an outer-most layer, a mass ratio of the catalyst noble metal present in said outer-most layer to the washcoat present therein being five times or more a mass ratio of the catalyst noble metal present in the inner layer below the outer-most layer to the washcoat present therein.

7. (Withdrawn) A catalytic converter, comprising:

a carrier;

a hydrocarbon (HC) trap layer trapping HC, said HC trap layer being disposed on the carrier; and

at least two catalyst layers comprising an inner layer disposed on the HC trap layer and an outer layer disposed on the inner layer, each of said inner and outer layers comprising a catalyst noble metal and a washcoat,

an amount of said washcoat present in the outer layer based on a unit volume of the carrier being smaller than an amount of the washcoat present in the inner layer based on the unit volume of the carrier.

8. (Withdrawn) A catalytic converter as claimed in claim 1, wherein the outer layer is an outer-most layer, said outer-most layer comprising palladium, said inner layer disposed below the outer-most layer comprising a combination selected from palladium, platinum and rhodium.

9. (Withdrawn) A catalytic converter as claimed in claim 2, wherein the outer layer is an outer-most layer, said outer-most layer comprising palladium, said inner layer disposed below the outer-most layer comprising a combination selected from palladium, platinum and rhodium.

10. (Withdrawn) A catalytic converter as claimed in claim 5, wherein the outer layer is an outer-most layer, said outer-most layer comprising palladium, said inner layer disposed

below the outer-most layer comprising a combination selected from palladium, platinum and rhodium.

11. (Withdrawn) A catalytic converter as claimed in claim 6, wherein the outer-most layer comprises palladium, said inner layer disposed below the outer-most layer comprising a combination selected from palladium, platinum and rhodium.

12. (Withdrawn) A catalytic converter as claimed in claim 7, wherein the outer layer is an outer-most layer, said outer-most layer comprising palladium, said inner layer disposed below the outer-most layer comprising a combination selected from palladium, platinum and rhodium.

13. (Withdrawn) A catalytic converter as claimed in claim 1, wherein the inner and outer layers comprise promoters, respectively, an amount of said promoter present in the outer layer based on the unit volume of the carrier being smaller than an amount of said promoter present in the inner layer based on the unit volume of the carrier.

14. (Withdrawn) A catalytic converter as claimed in claim 2, wherein the inner and outer layers comprise promoters, respectively, an amount of said promoter present in the outer layer based on the unit volume of the carrier being smaller than an amount of said promoter present in the inner layer based on the unit volume of the carrier.

15. (Withdrawn) A catalytic converter as claimed in claim 5, further comprising a carrier supporting the HC trap layer, said inner and outer layers comprising promoters, respectively, an amount of said promoter present in the outer layer based on the unit volume of the carrier being smaller than an amount of said promoter present in the inner layer based on the unit volume of the carrier.

16. (Withdrawn) A catalytic converter as claimed in claim 6, further comprising a carrier supporting the HC trap layer, said inner and outer layers comprising promoters, respectively, an amount of said promoter present in the outer layer based on the unit volume of the carrier being smaller than an amount of said promoter present in the inner layer based on the unit volume of the carrier.

17. (Withdrawn) A catalytic converter as claimed in claim 7, wherein said inner and outer layers comprising promoters, respectively, an amount of said promoter present in the outer layer based on the unit volume of the carrier being smaller than an amount of said promoter present in the inner layer based on the unit volume of the carrier.

18. (Withdrawn) A catalytic converter as claimed in claim 8, wherein said inner and outer layers comprising promoters, respectively, an amount of said promoter present in the outer layer based on the unit volume of the carrier being smaller than an amount of said promoter present in the inner layer based on the unit volume of the carrier.

19. (Withdrawn) A catalytic converter as claimed in claim 1, further comprising a base coat layer disposed between the carrier and the HC trap layer, said base coat layer comprising one of alumina and silica as a main component.

20. (Withdrawn) A catalytic converter as claimed in claim 2, further comprising a base coat layer disposed between the carrier and the HC trap layer, said base coat layer comprising one of alumina and silica as a main component.

21. (Withdrawn) A catalytic converter as claimed in claim 5, further comprising a base coat layer disposed between the carrier and the HC trap layer, said base coat layer comprising one of alumina and silica as a main component.

22. (Withdrawn) A catalytic converter as claimed in claim 6, further comprising a base coat layer disposed between the carrier and the HC trap layer, said base coat layer comprising one of alumina and silica as a main component.

23. (Withdrawn) A catalytic converter as claimed in claim 7, further comprising a base coat layer disposed between the carrier and the HC trap layer, said base coat layer comprising one of alumina and silica as a main component.

24. (Withdrawn) A catalytic converter as claimed in claim 8, further comprising a base coat layer disposed between the carrier and the HC trap layer, said base coat layer comprising one of alumina and silica as a main component.

25. (Canceled).

26. (Canceled).

27. (Canceled).

28. (Canceled).

29. (Cancelled).

30. (Currently Amended) A catalytic converter as claimed in claim 25, comprising:
a carrier; and
a layered structure disposed on the carrier, the layered structure including:
a hydrocarbon (HC) trap layer trapping HC, said HC trap layer being disposed on the
carrier; and

a multilayered catalyst system disposed on the HC trap layer, said multilayered
catalyst system comprising a first catalyst layer disposed on the HC trap layer and a second
catalyst layer disposed on the first catalyst layer disposed on the HC trap layer, the first and
second catalyst layers forming a dual-layered catalyst system that is disposed on the HC trap
layer such that HC released from the HC trap layer is purified by both the first and second
catalyst layers, said first and second catalyst layers comprising catalyst noble metals,
respectively, said catalyst noble metal present in the second catalyst layer being controlled to
be active earlier than the catalyst noble metal present in the first catalyst layer,

wherein the first catalyst layer comprises a first washcoat, and the second catalyst
layer comprises a second washcoat, an amount of said second washcoat present in the second
catalyst layer based on a unit volume of the carrier being smaller than an amount of the first
washcoat present in the first catalyst layer based on the unit volume of the carrier.

31. (Canceled).

32. (Canceled).

33. (Canceled).

34. (Canceled).

35. (Canceled).

36. (Canceled).

37. (Currently Amended) A catalytic converter ~~as claimed in claim 33, comprising:~~ a carrier; and a layered structure disposed on the carrier, the layered structure including: a hydrocarbon (HC) trap layer trapping HC, said HC trap layer being disposed on the carrier; and

a multilayered catalyst system disposed on the HC trap layer, said multilayered catalyst system comprising a first catalyst layer disposed on the HC trap layer and a second catalyst layer disposed on the first catalyst layer disposed on the HC trap layer, the first and second catalyst layers forming a dual-layered catalyst system that is disposed on the HC trap layer as viewed in a cross-section perpendicular to exhaust gas flow, said first and second catalyst layers comprising catalyst noble metals, respectively, said catalyst noble metal present in the second catalyst layer being controlled to be active earlier than the catalyst noble metal present in the first catalyst layer,

wherein the first catalyst layer comprises a first washcoat, and the second catalyst layer comprises a second washcoat, an amount of said second washcoat present in the second catalyst layer based on a unit volume of the carrier being smaller than an amount of the first washcoat present in the first catalyst layer based on the unit volume of the carrier.

38. (Canceled).

39. (Canceled).

40. (New) A catalytic converter as claimed in claim 30, wherein an amount of the catalyst noble metal present in the second catalyst layer based on a unit volume of the carrier is larger than an amount of the catalyst noble metal present in the first catalyst layer based on the unit volume of the carrier.

41. (New) A catalytic converter as claimed in claim 30, wherein a mass ratio of said catalyst noble metal present in the second catalyst layer to that in the second washcoat is higher than a mass ratio of the catalyst noble metal present in the first catalyst layer to that in the first washcoat.

42. (New) A catalytic converter as claimed in claim 40, wherein the catalyst noble metal present in the second catalyst layer comprises rhodium.

43. (New) A catalytic converter as claimed in claim 30, wherein the first and second catalyst layers comprise promoters, respectively, an amount of said promoter present in the second catalyst layer based on a unit volume of the carrier being smaller than an amount of the promoter present in the first catalyst layer based on the unit volume of the carrier.

44. (New) A catalytic converter as claimed in claim 30, further comprising a base coat layer disposed between the carrier and the HC trap layer, said base coat layer comprising one of alumina and silica as a main component.

45. (New) A catalytic converter as claimed in claim 37, wherein an amount of the catalyst noble metal present in the second catalyst layer based on a unit volume of the carrier is larger than an amount of the catalyst noble metal present in the first catalyst layer based on the unit volume of the carrier.

46. (New) A catalytic converter as claimed in claim 37, wherein a mass ratio of said catalyst noble metal present in the second catalyst layer to that in the second washcoat is higher than a mass ratio of the catalyst noble metal present in the first catalyst layer to that in the first washcoat.

47. (New) A catalytic converter as claimed in claim 45, wherein the catalyst noble metal present in the second catalyst layer comprises rhodium.

48. (New) A catalytic converter as claimed in claim 37, wherein the first and second catalyst layers comprise promoters, respectively, an amount of said promoter present in the second catalyst layer based on a unit volume of the carrier being smaller than an amount of the promoter present in the first catalyst layer based on the unit volume of the carrier.

49. (New) A catalytic converter as claimed in claim 37, further comprising a base coat layer disposed between the carrier and the HC trap layer, said base coat layer comprising one of alumina and silica as a main component.